

NOTE XVII.

THE HITHERTO KNOWN AFRICAN-SPECIES
OF THE GENUS HELOTA

BY

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Helota guineensis Rits. ♂ and ♀.

Notes Leyd. Mus. Vol. XI, p. 108, ♀.

Length 13—16 mm. — Elongate; shining; fulvous, with the head and mandibles, a broad streak along the middle of the pronotum, the scutellum and the smaller apical half of the elytra black, the latter with a slight dark bronze hue; moreover the base of the pronotum and that of the elytra edged with black, the sides of the prothorax edged with dark fulvous; the 5 or 6 basal joints of the antennae fulvous, the succeeding joints from pitchy to black; the legs are black, with the basal half of the femora, a more or less distinct spot (sometimes wanting) on the middle of the tibiae, and the base of the claws fulvous; the black of the apical half of the elytra with a deep triangular incision at the suture.

Head strongly produced in front of the eyes, rather remotely covered with large ovate punctures on the slightly raised middle portion, more closely punctured near the eyes, very finely on the narrowed front portion.

Prothorax distinctly broader at the base than long, narrowing to the front in slightly convex lines; the anterior angles rounded and slightly prominent; the base broadly

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bisinate, each sinuation divided into two smaller ones, median lobe subtruncate, the lateral angles acute. Upper surface remotely and irregularly punctured. Scutellum transverse, glossy and impunctate.

Elytra parallel, narrowly flattened along the sides, each of them provided with ten regular striae of rather small punctures which become slightly larger towards the sides but finer towards the end of the elytra; the interstices are impunctate; the 1st (sutural), 3rd, 7th and 9th interstices are distinctly raised on the apical portion, the 3rd and 9th extend to the apical margin.

Under surface: the triangular middle portion of the head is sparingly covered with fine but distinct punctures, the lateral portions are more strongly punctured; the sterna show some large punctures laterally and the elytral epipleurae some fine punctures along the inner margin of the basal fourth; the abdomen is nearly impunctate, the legs are impunctate.

♂. Legs more slender and more elongate than in the ♀; the underside of the anterior femora shallowly furrowed, covered on both sides of the smooth furrow with very minute warts; anterior tibiae flattened beneath, slightly curved in their apical half, the inner margin of the curvature fringed with fulvous hairs; intermediate tibiae with a minute triangular tooth at the end of the underside; posterior tibiae densely fringed on the underside of the apical third with fulvous hairs which increase in length towards the tip. — Ventral segments with a small group of hair-bearing punctures on both sides of the middle, the basal segment shallowly impressed along the middle, the impression provided with a small tuft of fulvous hairs, the apical segment broadly subtruncate posteriorly and with a large semi-ovate smooth impression in front of the truncation. — Elytra nearly conjointly rounded at the apex, slightly dehiscent at the suture, the posterior margin faintly sinuated, the 7th interstice sharply raised from one third from the base.

♀. Legs simple. — Ventral segments with a single hair-bearing puncture on both sides of the middle, the basal segment without tuft of fulvous hairs, the apical segment subtruncate posteriorly and slightly impressed along the middle. — Apices of elytra pointed, but slightly prolonged and narrowly dehiscent; the 7th interstice almost inconspicuously raised.

Hab. West Africa: Assinia, Accra and Abétifi. — Leyden Museum, Paris Museum and in the collections of Messrs. Alluaud, Neervoort van de Poll, Oberthür and Grouvelle.

Helota Sjöstedti Rits.

Notes Leyd. Mus. Vol. XXV, p. 163, ♂ and ♀.

Closely allied to the foregoing species but easily distinguishable

in the *male*-sex: by the much less strongly raised 7th elytral interstice and by the more narrowly rounded apices of the elytra;

in the *female*-sex: by the more strongly prolonged acutely pointed apices of the elytra.

There are specimens of this species which show a very distinct black spot in the fulvous basal half of the elytra at some distance from the base between the 3rd and 4th striae; in other specimens this spot is less distinct or nearly wanting, and in a male-specimen, belonging to the Berlin Museum of Natural History, no trace of it is discernable.

Hab. West Africa: Cameroon. — Stockholm Museum, Leyden Museum, Berlin Museum and in the collections of Messrs. Schenkling and Oberthür.

Helota africana Olliff, ♀.

Ann. & Mag. Nat. Hist. (5) XIII, p. 479. —

Waterhouse's Aid Ident. Insects, Pl. 153, fig. 3.

I have not seen the type-specimen of this species which comes from Angola and which belongs to the Lisbon

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Museum (Portugal), but in the collection of my friend René Oberthür is a *Helota*-specimen (♀) from Franceville (French Congo) which I believe to belong to *africana*.

It is allied to *guineensis* and *Sjöstedti* but differs from these species (in the female-sex) by the otherwise shaped apices of the elytra, these being obliquely truncate between the 3rd interstice and the suture; moreover its apical ventral segment is decidedly shorter and more broadly truncate at the apex.

Length 14 mm. — Elongate, narrowed in front and behind; shining; fulvous, with the head and mandibles, a broad streak along the middle of the pronotum, the basal edge of the pronotum and that of the elytra, the scutellum, a spot on the elytra at some distance from the base between the 3rd and 4th striae and the greater apical half of the elytra black, the latter with a slight dark bronze hue; the sides of the prothorax edged with dark fulvous; the 5 or 6 basal joints of the antennae fulvous, the succeeding joints from pitchy to black; the legs¹⁾ black, with the greater basal half of the femora and a broad ring around the middle of the tibiae fulvous.

Head strongly produced in front of the eyes, remotely covered with large ovate punctures on the slightly raised middle portion, more closely punctured near the eyes, very finely on the narrowed front portion.

Prothorax slightly broader at the base than long, narrowing to the front in nearly straight lines; the anterior angles rounded and slightly prominent; the base broadly bisinuate, each sinuation divided into two smaller ones, the median lobe broadly rounded, the lateral angles acute. Upper surface remotely and irregularly covered with large punctures. The scutellum transverse, glossy and impunctate.

Elytra parallel, narrowing in slightly curved lines near the apices which are obliquely truncate between the 3rd

1) The left foreleg and both the middlelegs are wanting in the specimen before me.

interstice and the suture; the sutural interstice ends in a minute spine; each elytron with ten regular striae of punctures which are larger in the 5th and following striae; those punctures of the 4th stria which are placed between the black spot and the black apical half are very minute and situated in a yellowish spot which occupies the 4th — 6th interstices just before and touching the black apical half¹⁾; the interstices are impunctate; the 1st (sutural), 3rd, 7th and 9th interstices are distinctly raised on the apical portion, the two latter faintly so from beyond the shoulder; the 3rd and 9th interstices extend to the apical margin.

Under surface: the triangular middle portion of the head is sparingly covered with fine but distinct punctures, the lateral portions are more strongly punctured; the sterna show some large punctures laterally and the elytral epipleurae some fine punctures along the inner margin of the basal fourth. Ventral segments with a single hair-bearing puncture on both sides of the middle, the apical segment broadly subtruncate posteriorly. Legs simple.

Hab. West Africa: Franceville (French Congo). — A single ♀ in the collection of Mr. René Oberthür.

Helota costata Rits. ♂ and ♀.

Notes Leyd. Mus. Vol. XI, p. 108, ♂²⁾.

Length 15—17 mm. — Elongate; subshining; fulvous, with the head and mandibles, a broad streak along the middle of the pronotum, the lateral and basal edges of the prothorax, the scutellum, the basal edge and the apical half of the elytra, as well as a stripe between the 3rd and 4th striae in the fulvous basal half black; the apical half of the elytra with a dark bronze hue; the 5 or 6

1) Traces of a similar spot are also visible in *Helota Sjöstedi* Rits.

2) I am informed by Prof. Kolbe that the indication „Zanzibar” as the habitat of this species is not correct, Mr. C. W. Schmidt, who sent the specimens to the Berlin Museum, having made his collections in Usambara, f. i. at Bondéi.

basal joints of the antennae dark rufous, the succeeding joints black; the anterior margin and the sides of the middle portion of the prosternum, as well as the sides of the meso- and metasternum bordered with black; the legs black, with the coxae, the base of the femora and that of the claws fulvous.

Head strongly produced in front of the eyes, rather remotely covered with strong punctures on the slightly raised middle portion, closely punctured near the eyes, very finely on the narrowed front portion.

Prothorax distinctly broader at the base than long, narrowing in straight or slightly convex lines to the front, anterior angles produced, narrowly rounded; the base broadly bisinuate, each sinuation divided into two smaller ones, median lobe subtruncate, the lateral angles acute. Upper surface coarsely punctured in the fulvous lateral portions, leaving however an elongate raised spot smooth; the black median streak smooth along the middle, irregularly punctured at the sides and on both sides of the median lobe. The scutellum transverse, glossy and impunctate.

Elytra subparallel, narrowly flattened along the sides; each elytron with ten regular striae of distinct punctures which become larger towards the sides; the interstices are alternately costate; the 2nd and 5th costae only join the apical margin; an oblique smooth callosity is present on each elytron between the 3rd and 6th striae just before the black apical half.

Under surface: the triangular middle portion of the head is remotely and very finely punctured, the lateral portions are coarsely punctured; the sterna show some punctures laterally and the elytral epipleurae have similar punctures on the inner half of the basal fourth; the ventral segments with a few hair-bearing punctures on both sides of the middle; the legs apparently impunctate.

♂. Legs more slender and more elongate than in the ♀; the underside of the anterior femora covered with minute warts or granules which give it a rough appearance.

rance; anterior tibiae slightly curved, longitudinally scratched on the outside, their inner margin fringed with fulvous hairs at the apical third; intermediate tibiae with a very minute triangular tooth at the end of the under surface; posterior femora slightly curved, flattened beneath, posterior tibiae with a tuft of long fulvous hairs at the end. — The basal ventral segment shallowly impressed along the middle, the apical one broadly truncate posteriorly and with a large semi-ovate smooth impression in front of the truncation. — Elytra nearly conjointly rounded and dehiscent at the apex, the posterior margin somewhat irregularly sinuate.

♀. Legs simple. — Basal ventral segment very faintly impressed along the middle, apical one regularly rounded posteriorly. — Apices of elytra slightly prolonged, pointed, narrowly dehiscent.

Hab. East Africa: Usambara. — Berlin Museum, Leyden Museum, German Entomological National Museum at Berlin and in the collection of Mr. René Oberthür.

Helota costata, var. *stigma* Rits. ♂ and ♀.

Differing from the typical *costata* Rits. in the following points: the fulvous basal half of the elytra shows a black stripe not only between the 3rd and 4th striae, but also between the 2nd and 3rd and 5th and 6th striae; the black along the sides of the elytra approaches nearer to the base, ending just beyond the shoulders; a fulvous stripe is present on the middle of the black apical half of the elytra between the 4th and 5th striae; the legs show a greater extend of the fulvous colour, the greater part of the femora being fulvous and the tibiae being provided with a fulvous ring.

Hab. East Africa: either Usambara or Dar-es-Salam. — A male-specimen in the Leyden Museum and a female one in the Berlin Museum.

Obs. Mr. Oberthür's collection contains a female-specimen from German East Africa which agrees perfectly with the

var. *stigma* with the only exception that the fulvous stripe in the black apical half of the elytra is wanting: it is therefore intermediate between the typical *costata* and the variety *stigma*.

Helota semipurpurea, nov. spec. ♂.

Strongly resembling *Helota costata* Rits. but proportionately broader, the flattened lateral borders of the elytra broader, the black apical half of the elytra with a dark purplish in stead of a dark bronze hue, and quite distinct by the hairy spot on the middle of the metasternum and on that of the basal ventral segment in the male-sex.

Length 16 mm. — Elongate; subshining; fulvous, with the head and mandibles, a broad streak along the middle of the pronotum, the scutellum and the apical half of the elytra black, the latter with a dark purplish hue; the fulvous basal half of the elytra shows a narrow black stripe between the 3rd and 4th striae; moreover the base of the pronotum and that of the elytra edged with black; the 5 or 6 basal joints of the antennae dark rufous, the succeeding joints black; the sides of the middle portion of the prosternum, as well as the sides of the meso- and metasternum bordered with black; the legs are black, with the coxae and the basal half of the femora beneath fulvous; the line of demarcation between the fulvous and black colour on the elytra is regularly waved.

Head strongly produced in front of the eyes, rather remotely covered with strong punctures on the slightly raised middle portion, more finely and closely punctured near the eyes, very finely on the apical portion.

Prothorax distinctly broader at the base than long, narrowing in slightly convex lines to the front, anterior angles slightly produced, rounded; the base broadly bisinuate, each sinuation divided into two smaller ones, median lobe subtruncate, lateral angles acute. Upper surface very coarsely and irregularly punctured, the punctures in the black streak more remote, absent along the middle of the

basal half. The scutellum transverse, glossy and impunctate.

Elytra parallel, flattened along the sides, broadly and conjointly rounded and narrowly dehiscent at the apex, and with a minute sutural tooth; the apical margin is minutely sinuated; each elytron with ten regular striae of punctures which become larger towards the sides; the interstices are alternately raised; the 2nd and 5th costae only join the apical margin; an oblique callosity is present on each elytron between the 3rd and 6th striae just before the black apical half; it shows small but distinct punctures belonging to the 4th and 5th striae.

Under surface: the triangular middle portion of the head is remotely covered with distinct punctures, the punctures on the lateral portions are larger and more closely set; the sides of the sterna and the elytral epipleurae along the inner margin of the basal fourth are sparsely punctured; the metasternum has, on the middle of the base, an ovate spot of hair-bearing punctures; the ventral segments are finely punctured near the base at the sides and a small group of hair-bearing punctures is present on both sides of the middle; the basal ventral segment is shallowly impressed along the middle, the impression provided in the middle with a small tuft of fulvous hairs; the apical ventral segment is broadly truncate posteriorly and provided in front of the truncation with a large semi-ovate smooth depression.

The legs are slender and elongate, apparently impunctate; the anterior femora are covered along the underside with minute warts or granules, the anterior tibiae are slightly curved, fringed with fulvous hairs along the inner margin of the apical half; the intermediate tibiae with an almost inconspicuous triangular tooth at the end of the underside; the posterior femora slightly curved, flattened beneath, the posterior tibiae with a tuft of long fulvous hairs at the end.

Hab. East Africa: Usambara (Nguelo). — The described male-specimen is in the Leyden Museum.

Helota Pauli Weise.

Deuts. entom. Zeitschr. 1903, Heft I, S. 171, ♂ und ♀.

Of this remarkable species Mr. J. Weise has published (l. c.) an ample description, but an important character of the ♂ seems to be overlooked by him, as nothing is said of the spot of hair-bearing punctures on the middle of the base of the metasternum, nor of the shallow groove along the middle of the first ventral segment, which groove is rather densely covered with hair-bearing punctures.

Moreover the male-sex shows the following characteristics not mentioned by the author: the apical ventral segment is broadly truncate posteriorly¹⁾; the legs are more slender and more elongate than in the ♀; the anterior femora are shallowly furrowed beneath and covered on both sides of the smooth furrow with minute warts or granules; the anterior tibiae are slightly curved and fringed with a few fulvous hairs along the inner margin of the apical portion; the intermediate femora are flattened beneath, the flattened streak bordered with minute warts; the intermediate tibiae with a very minute triangular tooth at the end of the underside; the posterior femora strongly curved, shallowly furrowed along the underside, the sides of the furrow marked with minute warts.

As to the black markings on the elytra, nothing is said of the black stripe on the apical fourth of the sutural interstice, nor of the black border along the apical half. Finally the meso- and metasternum are bordered with black at the sides.

Hab. East Africa: Usambara (Neu-Bethel). — Specimens of both sexes, which vary in length from $13\frac{1}{2}$ –19 mm., are in the Leyden Museum. — The type-specimens, which I have not seen, are from West Usambara (Kwai).

Helota tripartita, nov. spec. ♀.

This species seems to represent in Africa the group of

1) In the ♀ the last ventral segment is subtruncate at the apex.

the Asiatic *Helota semifulva*, *fulvitaris* and *dijficilis*, and is easily recognizable by its coloration: head and prothorax purplish blue, larger basal half of elytra fulvous, smaller apical half of elytra purplish blue.

Length 13 mm. — Elongate; shining; fulvous, with the head, prothorax, scutellum and basal edge and smaller apical half of elytra dark purplish blue; mandibles, antennae, trochanters, knees, extreme apex of tibiae and the tarsi black, the apical margin of the last antennal joint and the base of the claws fulvous; the line of demarcation between the two colours of the elytra gently waved.

Head broad, not so strongly produced in front of the eyes as in the other African species, remotely covered with large ovate punctures on the slightly raised middle portion, more closely punctured near the eyes, very finely on the narrowed front portion; near to the front margin two narrow transverse impressions are present and the space between them (the extreme tip of the clypeus) appears to be slightly raised.

Prothorax slightly broader at the base than long, narrowing to the front in nearly straight lines; the sides flattened, broadest anteriorly, gradually narrowing towards the base; the lateral margins finely raised, sharply crenulated anteriorly; the anterior angles rounded, slightly prominent; the base broadly bisinuate, each sinuation divided into two smaller ones; the median lobe subtruncate, the lateral angles acute, slightly bent inwards at the tip. Upper surface rather remotely and irregularly covered with very distinct though not deeply impressed punctures which are widely spread on the middle. The scutellum strongly transverse, glossy and impunctate.

Elytra parallel, broadly and conjointly rounded posteriorly, the lateral margins narrowly flattened from behind the shoulders; each elytron with ten regular striae of strong punctures which become smaller towards the apex; the interstices flat, rather sparingly covered with exceedingly fine punctures; the shoulders and epipleurae apparently impunctate.

Under surface: the triangular middle portion of the head sparingly covered with fine punctures, the lateral portions more strongly punctured; the sterna show large punctures laterally; the ventral segments are exceedingly finely punctured, but on the basal portion of the segments the punctures are somewhat more distinct, moreover the segments have a single hair-bearing puncture on both sides of the middle; the last ventral segment is broadly truncate at the apex and provided in front of the truncation with a shallow semicircular impression.

The legs are short and simple.

Hab. West Africa: North Cameroon (Johann-Albrechts Höhe). — The described female, the only specimen of this interesting species with which I am as yet acquainted, belongs to the Berlin Museum of Natural History.

SYNOPSIS OF THE SPECIES.

I. Pronotum bicolorous (fulvous and black).

A. Disk of pronotum with *one* black vitta.

Basal half of elytra fulvous, apical half black.

a. Elytral interstices flat or nearly flat, the 7th interstice more or less strongly raised in the ♂.

×. ♀. Apices of elytra pointed, without sutural tooth. — ♂. Apices of elytra more or less broadly rounded; basal ventral segment with a small hairy spot in the middle.

*. Apices of elytra in the ♀ but very slightly prolonged, in the ♂ broadly rounded; 7th elytral interstice in the ♂ strongly raised *guineensis*.

- ** Apices of elytra in the ♀ more strongly prolonged, in the ♂ more narrowly rounded; 7th elytral interstice in the ♂ but faintly raised. *Sjöstedti*.
- XX. ♀. Apices of elytra obliquely truncate between the 3rd interstice and the suture and with a small sutural tooth. (♂ unknown). *africana*.
- b. Elytral interstices alternately raised.
- §. Black apical half of elytra with a dark bronze hue. — ♂. Middle of metasternum and of 1st ventral segment without a hairy spot.
- †. Black apical half of elytra without a fulvous stripe in the middle; tibiae black *costata*.
- ††. Black apical half of elytra with a fulvous stripe in the middle (5th interstice); tibiae with a broad fulvous ring. var. *stigma*.
- §§. Black apical half of elytra with a purplish hue. — ♂. Middle of metasternum and of 1st ventral segment with a hairy spot. *semipurpurea*.
- B. Disk of pronotum with three black vittae. Elytra fulvous, all over with longitudinal black stripes. *Pauli*.
- II. Pronotum unicolorous (purplish blue). Basal half of elytra fulvous, apical half purplish blue. *tripartita*.

Leyden Museum, June 1905.